

Establishing a Common Land Unit

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Background

- Common Land Unit defined:
 - Permanent, contiguous boundary
 - Common land cover and management
 - Common owner
 - Common operator
 - “Field”



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Source Data

- Paper maps
- AS/400 database



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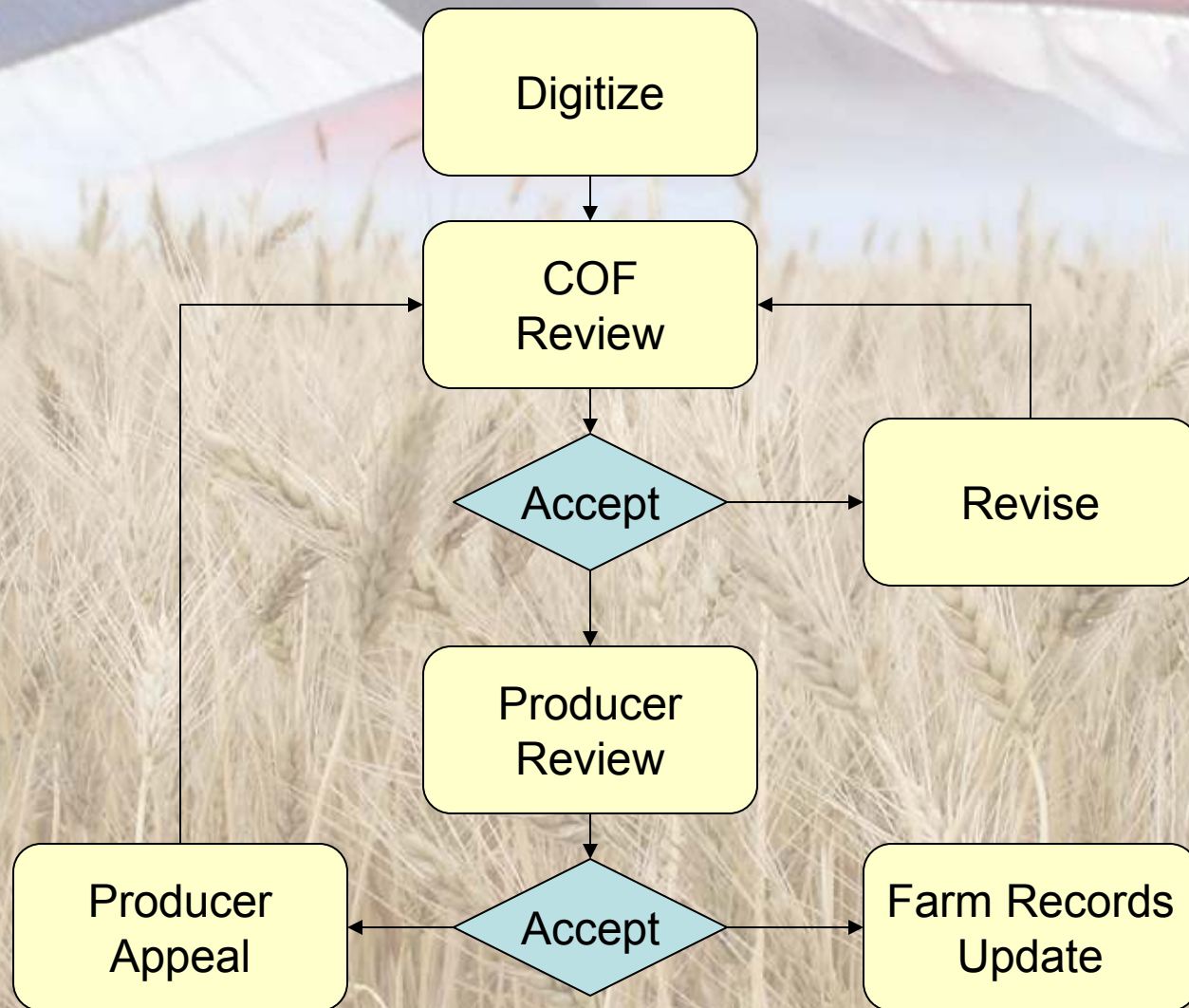
Attributes

- Physical location state/county
- Farm number
- Tract number
- CLU (field) number
- **Calculated acres**
- FSA Program acres
- Highly Erodible Land status
- Administering state/county
- Land Classification code



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CLU Life Cycle



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Digitizing Process

- Heads-up digitizing in ArcView 3
- Contract and FSA employees
- Linework based on existing maps
- Not a legal survey
- Intended for FSA program purposes only



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Certification

- County office reviews layer for accuracy
- Owners/operators receive map copy for review
- Farm records updated with new acres



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Maintenance

- Owner and operator changes
- Land use changes
 - New cropland
 - New housing developments
 - Mining operations
- Administrative transfers



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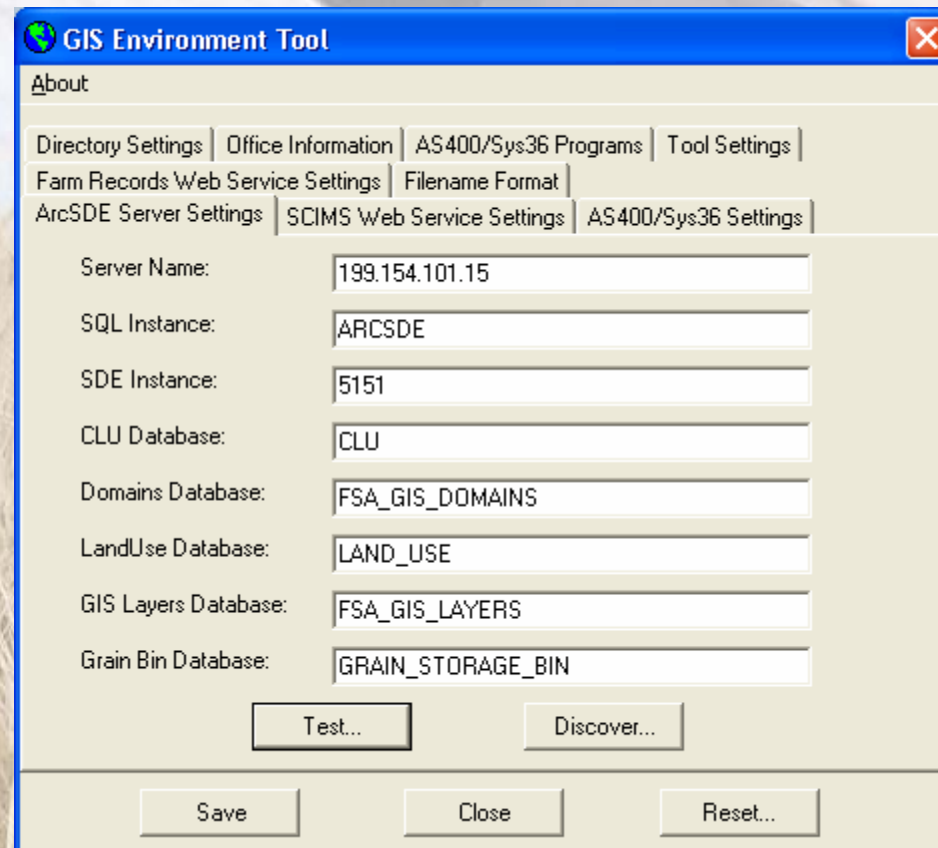
More Maintenance

- Each county is responsible for their own edits
- Software restricts access to authorized users
- Custom Maintenance Tool
 - Rearranges some tools
 - Locks out other tools
 - Robust topology and error checking
- Local data aggregated to state office
- Replication application in development



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GIS Environment Tool



The screenshot shows the 'GIS Environment Tool' window with a blue title bar and a close button. The window contains a tabbed interface with the following tabs: 'About', 'Directory Settings', 'Office Information', 'AS400/Sys36 Programs', 'Tool Settings', 'Farm Records Web Service Settings', 'Filename Format', 'ArcSDE Server Settings', 'SCIMS Web Service Settings', and 'AS400/Sys36 Settings'. The 'ArcSDE Server Settings' tab is currently selected. It contains several text input fields for configuration:

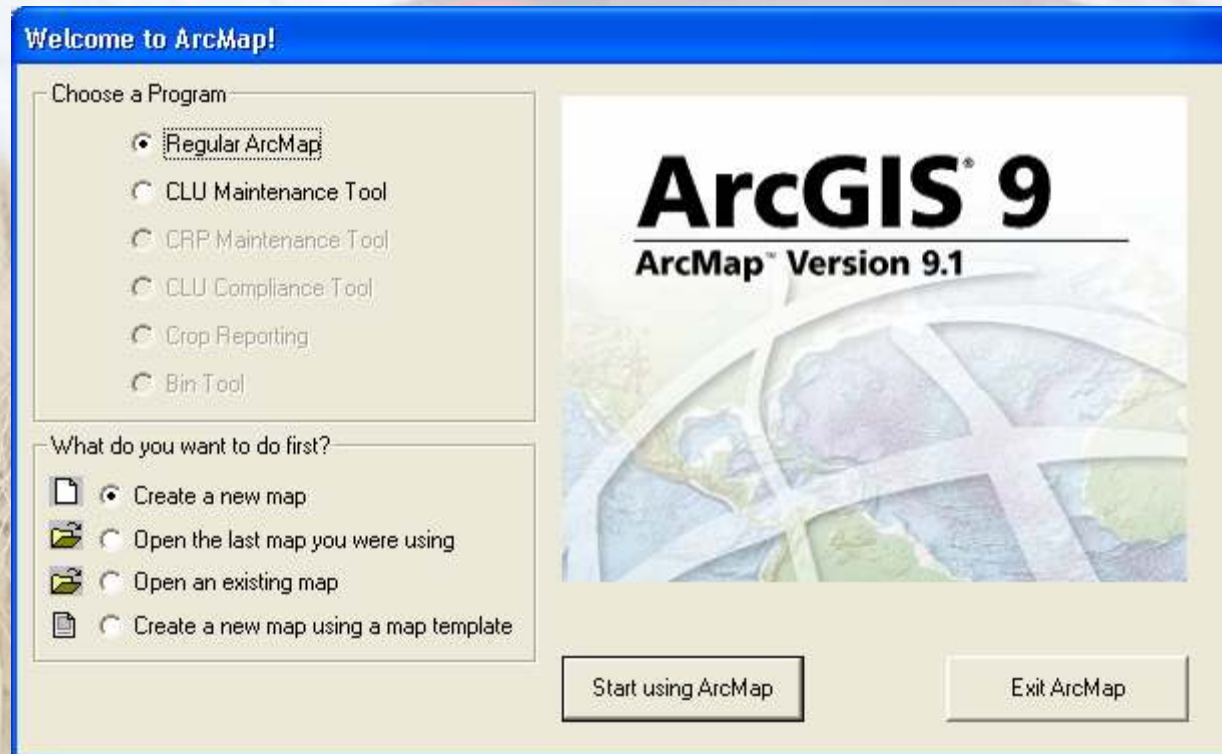
- Server Name: 199.154.101.15
- SQL Instance: ARCSDE
- SDE Instance: 5151
- CLU Database: CLU
- Domains Database: FSA_GIS_DOMAINS
- LandUse Database: LAND_USE
- GIS Layers Database: FSA_GIS_LAYERS
- Grain Bin Database: GRAIN_STORAGE_BIN

Below the input fields are two buttons: 'Test...' and 'Discover...'. At the bottom of the window are three buttons: 'Save', 'Close', and 'Reset...'.

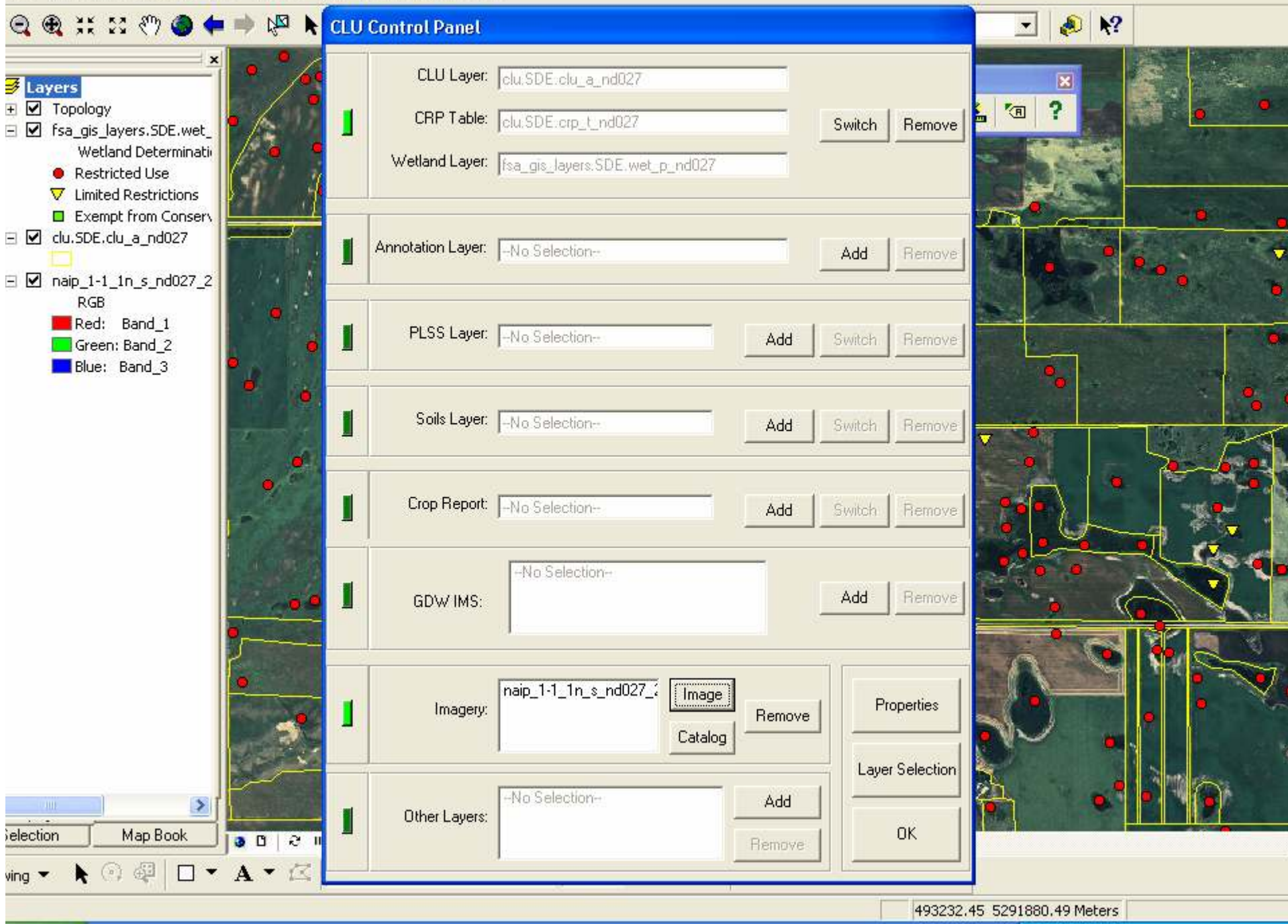


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CLU Maintenance Tool



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Layers

- ☒ Topology
- ☒ fsa_gis_layers.SDE.wet_
 - Wetland Determinati
 - Restricted Use
 - ▼ Limited Restrictions
 - Exempt from Conserv
- ☒ clu.SDE.clu_a_nd027
 -
- ☒ naip_1-1_1n_s_nd027_2
 - RGB
 - Red: Band_1
 - Green: Band_2
 - Blue: Band_3

USDA Maintenance Tool



USDA Acreage Toolbar



USDA WetLand...



USDA Utility Toolbar



USDA CRP Toolbar



USDA QC Toolbar





Layers

- ☒ Topology
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USDA Maintenance Tool



CLU Iterator

Farm: Tract: Field:

Acres: FSA Acres:

Land Class Code:

State: County:

Administrative FIPS

 State: County:

HEL Status

☐ Yes ☒ No ☐ Exempt ☐ Undetermined

Reason:

Comments:

1 of 1

Selected Feature

Selection Map Book

vning

494768.26 5289946.76 Meters

Software Changes

- Switched from ArcView 3.2a to ArcInfo 8.3
- Shapefile to SDE
- Upgraded from 8.3 to 9.1



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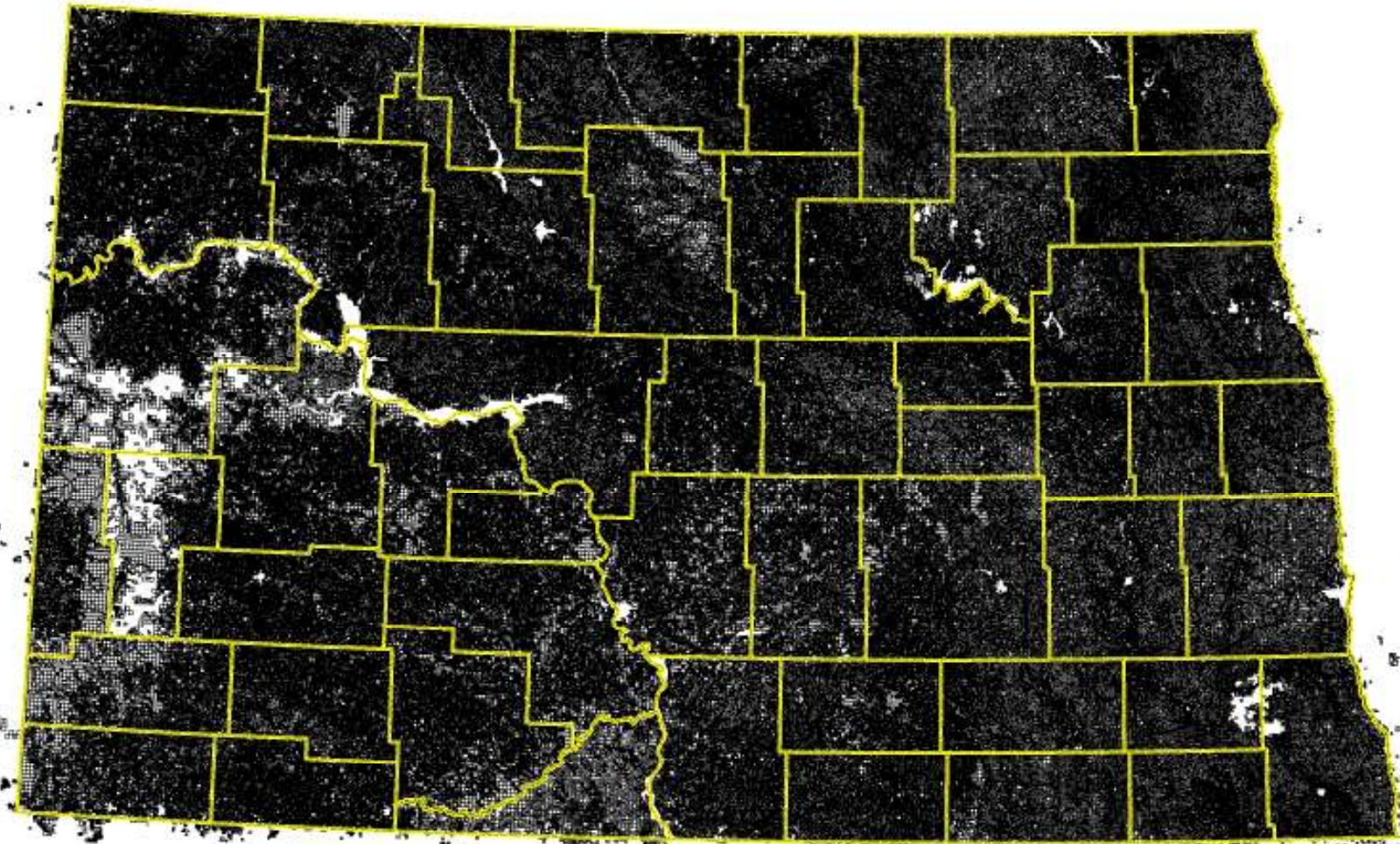
By the numbers

- Nationwide:
 - 2,300 Servers
 - 11,000 Workstations
- North Dakota:
 - 1.22 million polygons
 - 10,200 Farms
 - 23,300 Tracts



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Complete CLU



Distribution

- Complete CLU data available to landowner or operator upon request
 - Filled through county office
- CLU with polygon and acres available to general public
 - Filled through NRCS Data Gateway
 - <http://datagateway.nrcs.usda.gov/>
- Other data may be released under FOIA
 - Filled through state office



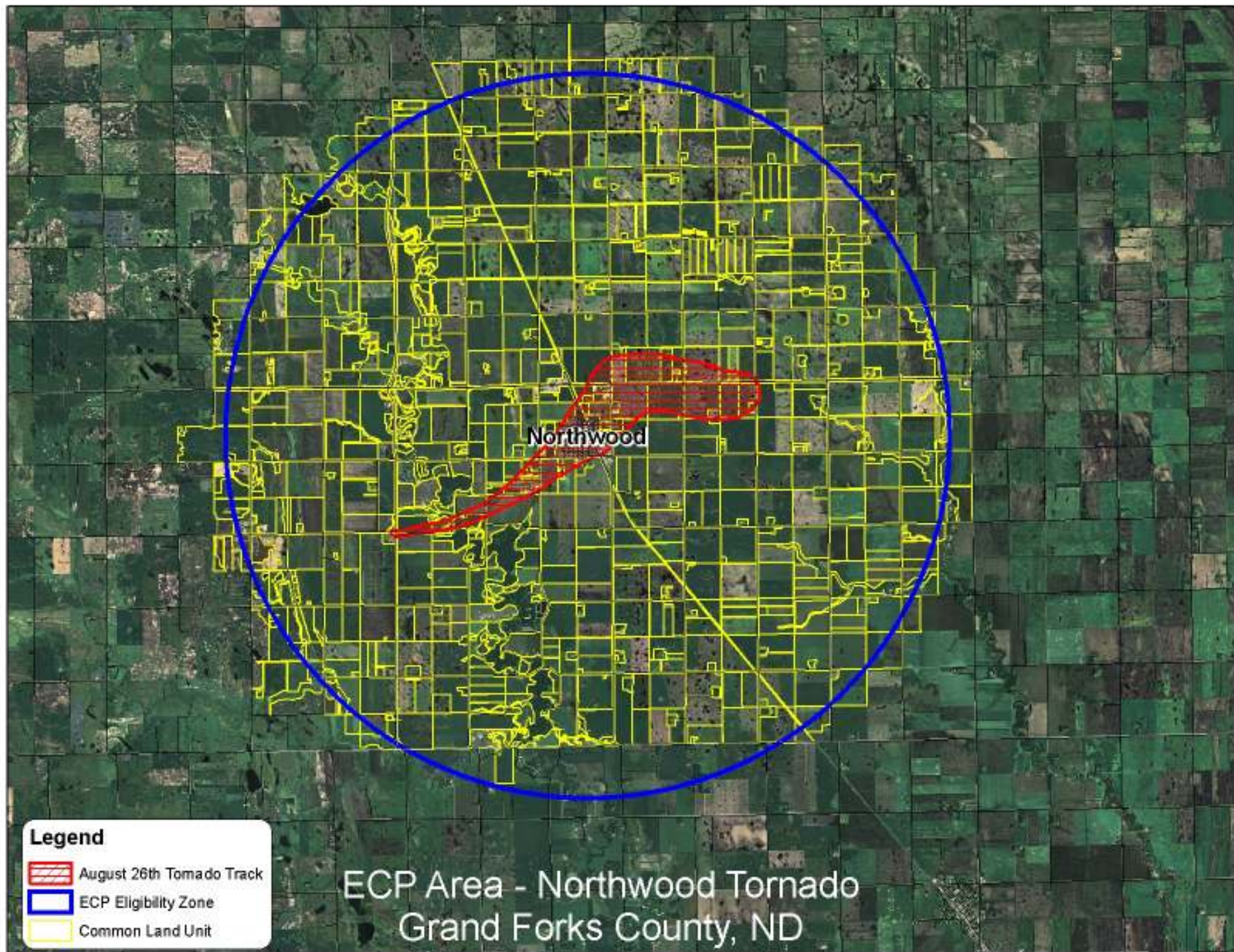
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How the CLU is Used

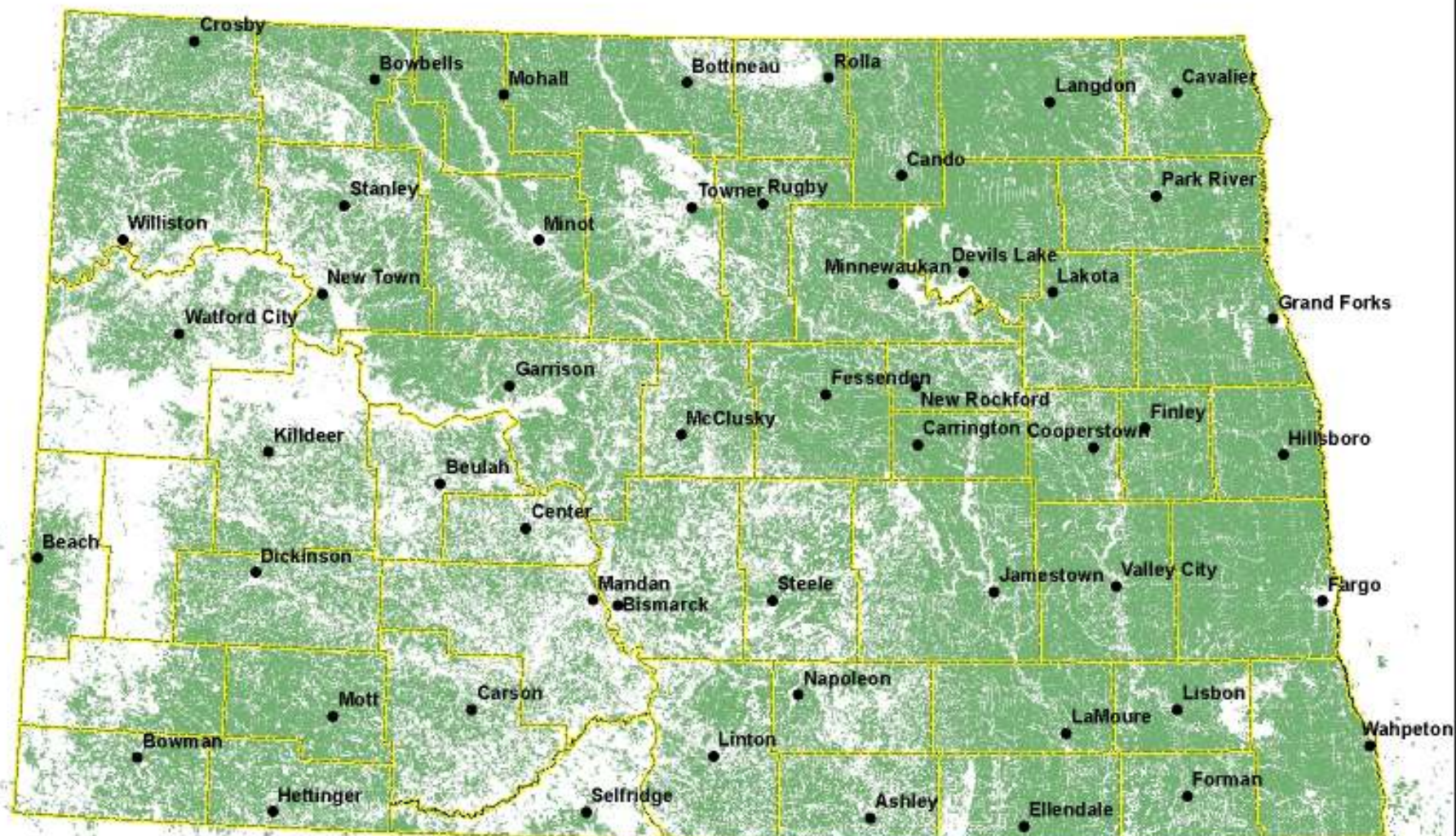
- Farm records
- Conservation programs
- Disaster
 - Who?
 - How much?
- Business analysis
 - Office locations
 - Staffing/workload



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North Dakota Cropland and FSA Offices



Questions?

- Contact:
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 - (701)893-2243



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